DOCUMENT RESUME

ED 059 963 SP 005 538

AUTHOR Webb, Jeaninne Nelson
TITLE The Effects of Training in Analysis of Classroom Behavior on the Self-Evaluation of Teaching Performance. Final Report.
INSTITUTION Alabama Univ., Tuscaloosa.
SPONS AGENCY Office of Education (DHEW), Washington, D.C. Bureau of Research.
BUREAU NO BR-9-D-061
PUB DATE 1 Sep 70
GRANT OEG-4-70-0007(057)
NOTE 58p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Educational Research; *Self Evaluation; *Teacher Behavior; *Teaching Experience; *Video Tape Recordings
IDENTIFIERS Alabama Funnel Self Evaluation Interview Guide

ABSTRACT

The study examined the question of whether training in the analysis of teaching behavior affects the self-evaluations of teachers who are given the opportunity to view and judge their own teaching performance by means of videotape recordings. Additional questions concerned the factors on which teachers focus when making their self-evaluations and whether teacher experiences have any effect on the self-evaluations. The subjects were 22 experienced teachers and 44 preservice student teachers, with 11 in-service teachers and 22 student teachers having training in the analysis of teacher behavior in 30 2-hour training sessions. The training included operation of videotape equipment, formulation and writing of educational objectives, use of two systems of classroom observation, and development of teaching strategies. A 30-minute lesson was recorded at the end of the period and subjects responded to their performance on the Alabama Funnel Self-Evaluation Interview Guide (included in the document). Findings indicated that there were no significant statistical differences between the trained and untrained groups, or between in-service teachers in the two groups. Student teachers with training focused on the teaching act and those without training focused on themselves as persons. The study was judged successful in identifying the factors which the subjects used as criteria for self-evaluation and showed that training had little influence on these factors. (MBM)

ED 059963

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

FINAL REPORT
Project No. 9-D-061
Grant No. OEG-4-70-0007 (057)

THE EFFECTS OF TRAINING IN ANALYSIS OF CLASSROOM BEHAVIOR ON THE SELF-EVALUATION OF TEACHING PERFORMANCE

Jeaninne Nelson Webb
University of Alabama
Tuscaloosa, Alabama

September 1, 1970

The research reported herein was performed pursuant to a grant with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

SP 005 535

ACKNOWLEDGMENTS

Sincere appreciation is expressed to Dr. Elizabeth Lewis, Director of the Elementary Student Teaching Program at the University of Alabama, for her consultation and support of this study.

Invaluable contributions to the study were made by Dr. R. Joseph Garrison and Dr. Richard Bedics who served as research assistants and spent long hours collecting data. Special thanks also go to Mr. Joseph Cason and Mr. Charles Babb for their assistance as data coders.

Finally, appreciation is expressed to Dr. Marie Sinclair, Supervisor of Tuscaloosa City Schools, and the teachers who served as subjects in the study. Without their willingness, cooperation and help this study would not have been possible.

TABLE OF CONTENTS

	Page
Acknowledgments	ii
List of Tables	iv
Summary	1
Introduction	4
Problem	5
Related Research	6
Procedures	
Subjects	10
In-Service Teachers	10
Pre-Service Teachers	11
Instrumentation	11
Training Procedures	13
Data Collection	15
Design of the Coding System	16
Statistical Treatment of the Data	19
Results	
Comparisons	20
Findings	20
Conclusions	38
Bibliography	39
Appendix A	41
Appendix B	48

LIST OF TABLES

Table		Page
1	Per Cents of Evaluative Responses and t Scores for All Trained and Untrained Teachers	21
2	Per Cents of Evaluative Responses and t Scores for All Trained and Untrained Teachers for the Item "Cause of Pupil Behavior"	25
3	Per Cents of Evaluative Responses and t Scores for Trained and Untrained In-Service Teachers	27
4	Per Cents of Evaluative Responses and t Scores for Trained and Untrained In-Service Teachers for the Item "Cause of Pupil Behavior"	31
5	Per Cents of Evaluative Responses and t Scores for Trained and Untrained Pre-Service Teachers	32
6	Per Cents of Evaluative Responses and t Scores for Trained and Untrained Pre-Service Teachers for the Item "Cause of Pupil Behavior"	36

SUMMARY

This study asked the question: does training in the analysis of teaching behavior effect the self-evaluations of teachers who are given an opportunity to view and judge their own teaching performance through the medium of video tape recordings? Additional questions related to this major question were: (1) on what factors do teachers focus when they make self-evaluations and (2) does teaching experience have any effect on the self-evaluations of teachers?

Sixty-six elementary classroom teachers served as subjects of the study, 22 experienced in-service teachers and 44 pre-service student teachers. Eleven in-service teachers and their 22 students teachers underwent training in the analysis of teacher behavior, the other subjects did not receive this special training.

The training in analysis of teacher behavior consisted of thirty two-hour training sessions held twice a week for a fifteen week period. The training consisted of:

(1) operation of video-tape equipment

(2) formulation and writing of educational objectives

(3) use of two systems of classroom observation

(4) development of teaching strategies

During the thirteenth and fourteenth week of the period all subjects prepared a thirty-minute lesson which was recorded under actual classroom conditions. Immediately after taping, the subjects viewed their own teaching performance and responded to the Alabama Funnel Self-Evaluational Interview Guide, an instrument designed especially for this study.

A category system was constructed to analyze the interviews. It was found that the verbal responses of the teachers could be classified under five major categories

which contained 20 items. Under each item, except two, a statement could be coded as positive or negative. If a teacher made both a positive and negative statement it was coded as "both."

Coders were trained to use the category system and the interviews were coded. The coded interviews were statistically analyzed using the Critical Ratio Technique. This statistical design made it possible to analyze the difference between percentages for each item for the two groups, subjects who received the special training and those who did not.

Three comparisons were made: (1) the verbal self-evaluational responses of all subjects who had received training with the responses of those who had not received such training, (2) the verbal responses of the trained in-service teachers with the responses of the untrained in-service teachers, and (3) the verbal responses of trained pre-service teachers with the responses of pre-service teachers who did not have special training.

The findings of the comparisons indicated there were no significant statistical differences between the verbal responses of teachers who had received training and those who did not. When the groups were broken into in-service and pre-service teachers, no differences were found in the self-evaluations of the in-service teacher groups. Those student teachers who received training tended to focus on the teaching act itself and to like what they saw. The student teachers without training emphasized their perceptions of themselves as persons and tended not to like what they saw.

The category system developed for coding the verbal self-evaluational responses of teachers very clearly illustrated on what factors teachers tend to focus when they evaluate their own teaching performance without the use of external criteria imposed by someone in an authority role. The teachers in this study tended to look at:

(1) themselves as people
(2) themselves as teachers
(3) their pupils
(4) the teaching act itself

The training in the analysis of classroom behavior seemed to have no influence on the self-evaluations of the experienced teachers and very little on the student teachers. The student teachers who had training tended to focus more on the teaching act than did the untrained group.

It can be concluded that the study was successful in identifying the factors which the subjects used as criteria in making self-evaluations. The data also indicated that training in analysis skills had little influence on these factors.

INTRODUCTION

The evaluation of teacher effectiveness has been an elusive goal which research in teaching has pursued for the last half century. Reviewers of this research invariably conclude that all efforts to identify, evaluate and predict proficiency have met with failure.[1] Yet the major purpose of those responsible for the education and supervision of teachers has been to help teachers achieve this proficiency and competency. In the widespread search for the means by which desired competence can be assessed, one of the most promising approaches has been in terms of self-evaluation. The rationale which supports this approach is based upon the assumption that the quality of teaching can be improved through a program of self-evaluation; the teacher must judge his own effectiveness.[2] This study proposed to deal with the problem of establishing skills necessary for the process of self-evaluation.

The process of self-evaluation is a task for which most teachers have had little preparation. Although skills of self-evaluation are often assumed automatically to accompany degrees and certificates, they remain in reality to be developed by teachers themselves. For all practical purposes the measurement of student achievement and subjective assessments by supervisors, administrators or "impartial" raters have long been the only bases against which a teacher could compare his performance. The development of behavioral and performance objectives, the advent of systematic observation of classroom behavior, and the improvements in assessing levels of cognition in the classroom are factors which have placed teacher self-evaluation in the realms of practicality. There has been a growing trend to train teachers in procedures and techniques for the analysis of classroom behavior. The proponents of this movement

---

[1]Barr, A. S. "The Measurement and Prediction of Teaching Efficiency: A Summary of Investigations." Journal of Experimental Education, 16:203-283, 1948.

[2]Herrick, Virgil E. "The Evaluation of Change in Programs of In-Service Education." Part I, Fifty-Sixth Yearbook, National Society for the Study of Education, Chicago, 1957, p. 338.

postulate that teachers who have achieved basic skills in writing and using behavioral objectives and in analyzing classroom behavior through systematic observation will be in the position to make meaningful evaluation of their own teaching behavior.

This study attempted to investigate the validity of this postulate. Through the approach of comparing the self-evaluations of teachers trained in the analysis of classroom behavior with those of teachers not trained in such skills it was possible to identify factors which seem to influence self evaluation.

Problem

The purpose of this study was to identify the factors in teachers' self-evaluations of their classroom behavior and to compare the self-evaluations of teachers trained in the analysis of teaching behavior with the self-evaluations of teachers who did not have this training.

Specific research questions follow:

(1) When teachers are given the opportunity to observe their own teaching behavior, what are the factors on which they tend to focus?

(2) What are the differences, if any, in the verbal self-evaluations of teachers trained in the analysis of teacher behavior and those who do not receive such training?

(3) Does teaching experience influence the self-evaluation of teachers?

  (a) What are the differences, if any, in the verbal self-evaluations of in-service teachers trained in the analysis of teacher behavior and those who do not receive such training?

  (b) What are the differences, if any, in the verbal self-evaluations of pre-service teachers trained in the analysis of teacher behavior and those who do not receive such training?

Related Research

A great body of educational literature has been devoted to theorizing and reporting research concerned with determining and predicting teacher effectiveness. Findings by Brown,[3] from a study which investigated the ratings of teacher competence by principals, supervisors, state department personnel, professors of education, and classroom teachers, probably sum up the situation of evaluation as it now stands. He reports more variance between evaluators' ratings of a single teacher than between behavior of teachers being observed and rated. The data gathered from the evaluative rating of a teacher told more about the raters than the teachers being observed. He concludes that external judgments of teacher competence must remain relative, as they are based upon a multiplicity of criteria employed by the various individuals who observe and judge a teacher.

An alternative to an outside evaluator is for teachers to evaluate their own teaching performance. The concept of self-evaluation is probably as old as mankind's concept of teaching. However, it was during the second decade of this century that self-evaluation scales first began to appear in professional literature. The purpose of these early scales was to furnish the teacher with guidelines by which he could rate his own effectiveness. These often concentrated more heavily on personal characteristics and the community relationships of the teacher than on actual classroom interaction and instructional behavior. The following examples of items from early scales are typical:

> "Do I take proper care of my hair, nails, teeth?"[4]
>
> "Community Leadership: (a) Appreciation of rural conditions; (b) Interest in home life of children; (c) Promotion of social activities."[5]

---

[3]Brown, Bob Burton, "An Investigation of Observer-Judge Ratings of Teacher Competence" U.S.O.E. Contract No. 6-10-288 Gainesville, Florida: University of Florida, 1969.

[4]Adams, W. C. "Two Teacher Rating Cards." American School Board Journal, 1919. 59:101.

[5]Foster, F. M. "A Score Card for Rural Teachers" School and Society, 1920, 12:132.

"Paper on floor, overstacked waste baskets, and other evidence of untidiness are unpardonable."[6]

Although the focus in subsequent years slowly shifted to more emphasis on the teaching act and a teacher's relationship with his students, it was not until the sixties that any real change in approaches to self-evaluation were made. The literature of the period between 1920 and 1960 reveals that self-evaluation was to be done largely in terms of a teacher's introspection using criteria imposed from external sources.

The development of technological innovations and research methodologies which began to appear in the last decade have made a different approach to self-evaluation possible. The development and refinement of portable audio-tape and video-tape recorders have enabled teachers to view their own classroom behavior from the vantage point of an outside observer. The teacher is able to see himself as others see him, albeit this viewpoint will undoubtedly be highly colored by his own values and attitudes. Video-tape recordings can provide objective data of an individual's teaching behavior, yet cannot assure how or if the information will be used in the evaluation of that behavior.

There is, however, a quantity of evidence reported in the research which suggests the types of skills and techniques that could contribute to skills of self-evaluation. Research in systematic observation has been extensive. Amidon[7] and Flanders[8] have found there are certain verbal teaching patterns which are associated with superior pupil achievement; hence are used by the more effective teacher. In addition to the relationship of verbal interaction and pupil achievement, Ober[9] concludes that interaction analysis

---

[6]Wiedefeld, M. T. "Teacher Self-Rating Scale" Elementary School Journal, 1924, 24:569.

[7]Amidon, E. J. "Dependent-prone Students in Experimental Learning Situations." Unpublished doctoral dissertation. Minneapolis, Minnesota: University of Minnesota, 1959.

[8]Flanders, N. A. "Teacher Influence, Pupils' Attitudes, and Achievement." Ann Arbor, Michigan: University of Michigan, 1962.

[9]Ober, Richard L. "The Nature of Interaction Analysis" High School Journal, October, 1967, 51:7-16.

in particular and systems of classroom observation in general provide two major functions which are important factors in the process of self evaluation: (1) systems of classroom observation represent a kind of classroom language which allow the classroom teacher and those responsible for his training and/or supervision to communicate more clearly regarding teaching practices and (2) systems of observation provide reliable and meaningful feedback regarding the effectiveness of newly planned teaching strategies under actual classroom conditions. He also lists six operations of utmost importance to effective teaching which classroom observation systems assist the teacher in performing:

1. Identify and separate the contributing elements that constitute a given teaching-learning situation.

2. Conceptualize the relationships between these interacting elements.

3. Select and plan instructional strategies that will facilitate maximum student learning in a variety of teaching-learning situations.

4. Develop and sharpen suitable skills in order to transform the selected instructional strategies into practice in the classroom.

5. Acquire reliable and meaningful data which can subsequently be analyzed to provide feedback concerning the quality of the teaching performance.

6. Improve future teaching performance by means of suitable modification and revision.

Teachers who have control over these operations should be in a position to make meaningful evaluations of their performance.

Research also indicates that the writing and use of educational objectives in behavioral or performance terms also provide teachers with data in terms of pupil achievement that can be used in the self-evaluation of teaching performance. McNeil[10] reports teachers were almost unanimous in believing that the use of behavioral objectives as the criterion was the best basis for the evaluation of instructional effectiveness.

---

[10]McNeil, John, "Concomitants of Using Behavioral Objectives in the Assessment of Teacher Effectiveness." Journal of Experimental Education, Fall, 1967, 36:69-74.

Systematic observation has been used to provide teachers with feedback in order that they can make changes in their classroom beahvior. Studies which have used this technique appear frequently in the literature. Bondi's[11] study can serve as an example of this approach. Using a form of interaction analysis as the observation system, he found that giving student teachers data concerning their teaching behavior caused them to differ significantly in the types of verbal behaviors they used from those employed by student teachers who did not receive such feedback. Although not expressly mentioned as part of the feedback-change process, the element of evaluation is necessarily present in such a situation. However in this study, as in similar studies, a second person in an authority role served as mediator in the process; the college supervisor gave the feedback to the student teacher. Although the data could be considered objective, the criteria by which the judgments were made were heavily influenced by an external source, the supervisor.

Although the study being reported used the techniques of systematic observation, writing of performance objectives, and video-taping of live classroom behavior as factors in the evaluative process, the focus was on self-evaluation. Therefore the mediator in the role of an authority figure was removed from the process. If self-evaluation of teaching behavior is a useful concept, then it must serve the classroom teacher when he is free from judgments, either implied or explicated, from outside sources. This study attempted to examine what teachers, when freed from externally applied criteria, report concerning their own practices. Additionally, an effort was made to discover if certain skills in the analysis of teaching behavior would have any effect on these reports.

---

[11]Bondi, J. C. "The Effects of Interaction Analysis Feedback on the Verbal Behavior of Student Teachers" Educational Leadership, 1969, 26:794-799.

PROCEDURES

Subjects

Sixty-six female elementary teachers were used as the population of this study. The population consisted of 44 pre-service student teachers and 22 in-service teachers who served as cooperating teachers in the elementary education student teaching program at the University of Alabama.

In-Service Teachers. The in-service teachers were divided into two groups of 11 each. one group underwent training in the analysis of classroom behavior, the other did not. These teachers were not randomly chosen from the entire population of cooperating teachers, nor were they randomly assigned to the two groups. Because of the nature of the project, (necessitating a large amount of time for training as well as the teachers' willingness to agree to live classroom video taping) random sampling was not possible. Both groups of teachers were chosen on a volunteer basis; the cooperating teachers trained in analysis of classroom behavior were part of the in-service program conducted by the Tuscaloosa City School System* and were approached to work in this study as an extension of their in-service program. They also were permitted to apply for three semester hours of graduate credit from the University of Alabama for participating in the program. The 11 cooperating teachers who were not especially trained were asked to volunteer on the basis that their student teachers would be part of the study and their help would be needed.

The cooperating teachers in the study met the same minimum requirements that the student teaching program at the University of Alabama demands of all cooperating teachers. These requirements include: masters degree, minimum of three years of successful teaching experience, and ratings as a superior teacher by principals, supervisory personnel and elementary education staff members.

---

*This in-service program, Project Process, was designed to improve classroom instruction through teacher self-evaluation and was funded through Title III of the Elementary and Secondary Education Act.

PROCEDURES

Subjects

Sixty-six female elementary teachers were used as the population of this study. The population consisted of 44 pre-service student teachers and 22 in-service teachers who served as cooperating teachers in the elementary education student teaching program at the University of Alabama.

In-Service Teachers. The in-service teachers were divided into two groups of 11 each, one group underwent training in the analysis of classroom behavior, the other did not. These teachers were not randomly chosen from the entire population of cooperating teachers, nor were they randomly assigned to the two groups. Because of the nature of the project, (necessitating a large amount of time for training as well as the teachers' willingness to agree to live classroom video taping) random sampling was not possible. Both groups of teachers were chosen on a volunteer basis; the cooperating teachers trained in analysis of classroom behavior were part of the in-service program conducted by the Tuscaloosa City School System* and were approached to work in this study as an extension of their in-service program. They also were permitted to apply for three semester hours of graduate credit from the University of Alabama for participating in the program. The 11 cooperating teachers who were not especially trained were asked to volunteer on the basis that their student teachers would be part of the study and their help would be needed.

The cooperating teachers in the study met the same minimum requirements that the student teaching program at the University of Alabama demands of all cooperating teachers. These requirements include: masters degree, minimum of three years of successful teaching experience, and ratings as a superior teacher by principals, supervisory personnel and elementary education staff members.

---

*This in-service program, Project Process, was designed to improve classroom instruction through teacher self-evaluation and was funded through Title III of the Elementary and Secondary Education Act.

In the experimental group, those who received training, there were six primary grade teachers and five intermediate grade teachers. Their ages ranged from 25 to 60 with a median age of 37; their teaching experience ranged from 3 to 38 years with a median of 15. The control group, those cooperating teachers who did not receive training, also consisted of six primary grade teachers and give intermediate grade teachers. Their ages ranged form 24 to 65 with a median age of 35; their teaching experience ranged from 3 to 39 with a median of 13 years.

Pre-Service Teachers. The student teachers were divided into two groups, each group consisting of 22 members. These students were assigned to the cooperating teacher chosen for the study in the same manner as all student teachers are assigned at the University of Alabama. Each prospective student teacher is asked to specify at what grade levels and in what schools she prefers to do her student teaching. Student teaching assignments are made on the basis of this information and the availability of openings by the Director of Student Teaching. No special consideration was given to the subjects of this study; if they were assigned to a cooperating teacher who volunteered for the project they then served as subjects, either experimental or control. These student teachers were similar in (1) age (ages ranged in both groups from 20 to 26, median 21), (2) prior teaching experience (none), (3) race (white), (4) residence (all from the State of Alabama), and (5) grade point average (the mean grade point average for the group which received training, 1.54; for the group which did not receive the special training it was 1.49. These means were tested, and no significant difference was found). Lastly, all were expected to be eligible to receive a teaching certificate at the end of the student teaching experience.

Instrumentation

As one of the objectives of this study was to identify the factors that teachers emphasize or respond to when evaluating their own teaching, one of the research problems was to devise a method for collecting data which would not impose criteria on the teachers' self-evaluation. Also, as the purpose of the study was to determine the effect of training in the analysis of classroom behavior on self-evaluation, it was necessary to devise a method of soliciting those evaluations which would not be in itself a teaching device.

It was decided that an interview guide could be constructed which would allow the teacher to express herself freely but at the same time keep her remarks relevant to the

purpose of the interview, evaluation of a video-taped recording of an actual classroom lesson. In order to avoid influencing or directing the interviewee's responses, a funnel sequence was decided upon. The Alabama Funnel Self-Evaluational Interview Guide* was developed for this study. The guide was so named because it was structured to produce unrestricted responses which were followed by more specific questions.

The instrument consists of two sections. Part I contains four open-ended questions which allowed the subjects to express themselves freely. They are:

(1) How do you feel about the lesson you just viewed?

(2) What did you see that you liked about yourself? About the lesson?

(3) What did you see that you did not like about yourself? About the lesson?

(4) If you were to teach this lesson again would you change it in any way?

Part II includes 15 statements which call for specific responses. These statements are related to the unrestricted questions in Part I. They cover five areas:

(1) objectives of the lesson

(2) organization of the lesson

(3) procedures and techniques

(4) pupils' reactions to the lesson

(5) overall evaluation of the lesson

Each statement is followed by a five-point rating scale. The teacher was asked to rate herself on the scale and to explain her rationale for that rating.

---

*The conceptualization and development of this guide was largely the work of Richard Bedics, one of the research assistants participating in this study.

Part I of the Alabama Funnel Self-Evaluational Guide was administered orally, and the subjects responses were recorded on audio tape. Part II of the instrument was completed in writing by the subjects after they had responded to Part I. A copy of the instrument and a complete description of its development can be found in Appendix A.

Training Procedures

Thirty-three teachers, 11 cooperating teachers and their 22 student teachers who were participating in the elementary education student teaching program at the University of Alabama during the 1969 fall semester received training in the analysis of teaching behavior. These teachers participated in two two-hour sessions each week for the 15 week semester. Their training included the following skills:

1. The use of video taping equipment. This acquainted the teachers with the mechanics of the video-tape equipment.

2. The formulation and writing of educational objectives. Objectives at all levels were dealt with, from general, overriding objectives to instructional objectives in behavioral terms. This enabled teachers to clarify their own purposes in terms of what they intended to accomplish in the classroom.

3. The use of two systems of classroom observation

   (a) The Reciprocal Category System (RCS).[12] The Reciprocal Category System, a form of interaction analysis, is an observation system designed to identify, classify, quantify, and analyze the verbal interaction of the classroom. The original system of interaction analysis developed by Ned Flanders was modified by Richard Ober to direct more attention to student talk. The role of the RCS is to a analyze the socio-emotional climate of the classroom.

---

[12]Bentley, E. L. and Miller, E. Systematic Observation: The Reciprocal Category System. Atlanta: Supplementary Educational Center, 1969.

(b) The Florida Taxonomy of Cognitive Behavior (FTCB).[13] The Florida Taxonomy of Cognitive Behavior classified and measures the cognitive level at which teachers and students are performing in the classroom. It is a classroom observation instrument based on the Taxonomy of Educational Objectives: Cognitive Domain, edited by Bloom and others.

During nine meetings the teachers viewed video-taped lessons to practice the use of the coding systems. This enabled teachers to look at and analyze their behavior from two very different vantage points, both of which reflect important dimensions of the classroom.

4. The development of instructional strategies. The teachers were helped to find the ways and means to enable their pupils to perform specified tasks, both in the cognitive and affective domains. This was done through the use of:

   a. simulation

   b. micro-teaching

These sessions were conducted by the director and the two research assistants of this study. They also served in the official capacity as college supervisors of the student teachers.

As part of the training program each teacher prepared three lessons which were video-taped by the research personnel of the study. Immediately after the taping the teachers were permitted to view these tapes privately. No evaluative comments were made by the researchers. When pressed by the teachers for an opinion, non-committal comments were given. The purpose of training was to teach skills in analysis of teaching, not to impose criteria with which the subjects were to evaluate themselves. Therefore every effort was made not to influence the self-evaluative process itself. Originally it had been planned that the teachers would do their own taping; however, the video-tape recorders proved to be such

---

[13]Webb, J. N. "The Florida Taxonomy of Cognitive Behavior: A Working Manual" In A. Simon and E. G. Boyer (Ed.) Mirrors for Behavior, Vol. 8, Philadelphia: Research for Better Schools, Inc., 1970.

delicate instruments that to keep them functioning it was necessary for the research team to operate them. One advantage to this procedure was that it was possible to control the number of experiences each teacher had in viewing her classroom behavior on tape.

The group of teachers which received no training in the analysis of teaching behavior followed the customary practices of the student teaching program. Cooperating teachers and their student teachers met twice a week on an individual basis for a scheduled one hour meeting to discuss the student teacher's progress and to plan instruction. In addition to their work in the public schools, the 22 student teachers met as a group once a week, for one hour, at the University for a seminar in instruction and discussion of problem solving in teaching. This seminar was conducted by the college personnel who served also as supervisors of these student teachers.

Data Collection

The subjects were asked to prepare a thirty minute lesson which could be presented to a small group. Because of the extremely wide variability in the type of lesson that would be possible within a subject matter area such as language arts or the social sciences, it was decided that a better measure to control variability of the lessons to be taped and evaluated would be to specify type of lesson. Thus each subject was asked to prepare and teach a lesson that involved a group discussion and focused on substantive content to be learned by the students.

In order to alleveate the effect that a teacher's first viewing of her own video-taped performance might have on the self-evaluation process, the teachers in the group which had received no training in classroom analysis all had at least one experience with video-taping prior to data collection.

During the thirteenth and fourteenth week of the fall semester of 1969, each subject taught a thirty minute lesson which was video-taped under actual classroom conditions. Immediately after the taping, the subjects viewed the video-tape and then responded to the Alabama Self-Evaluational Interview Guide. The responses to Part I of the guide were recorded on audio tape and the responses to Part II were written by the subjects. The taped oral responses were subsequently transcribed verbatim. These typescripts of verbal responses together with the written responses provided the data to be analyzed.

Design of the Data Coding System

Using the typescripts of the verbal responses to Part I of the interview guide, a coding system was developed to classify statements the subjects had made about their own teaching performance. Twelve randomly selected typescripts were used in the initial development of the coding system. A careful analysis of the selected typescripts revealed five broad categories under which all of the subjects' statements could be classified. Each broad division contained two or more items, with a total of 20 items. The categories, their description, and the items they contained follow:

I Physical Environment. This category was used to code statements concerned with the presence of the video-tape equipment. Two items were included in this category:

(a) Video-tape Equipment. This included video recorder and camera.

(b) Microphone. This item was explicity named by some teachers who did not see the microphone as part of the video-tape equipment.

II Personal Characteristics. This category reflected comments which teachers made about their physical selves. This category consisted of four items:

(a) Voice. Included under this item were statements concerned with pitch, tonal quality, clarity, intonation patterns, and regional dialects.

(b) Appearance. Comments about physical size, appearance of hair, and facial expression were coded under this item.

(c) Non-Verbal Mannerisms. This item was used to code comments concerning posture, use of the body, or habitual facial and hand movements.

(d) Verbal Mannerisms. This included statements about speech characteristics such as repetition of certain words (verbal tics).

III Teacher Characteristics. This category was used to classify comments which dealt with the subject as a teacher. Interestingly, only two items were identified:

(a) Dynamism. This item reflected concern with the enthusiasm, poise or presence of the teacher during the lesson.

(b) Amount of Verbal Behavior. Comments concerning the amount of talking the teacher did throughout the lesson were recorded here.

IV Pupil Behavior. This category reflected the teacher's awareness or a concern with pupils' behavior during the lesson. Six items were included:

(a) Recognition of Eye Contact. Teacher statements concerned with their looking at the pupils or catching the pupil's eye were coded here.

(b) Discipline. This item was used to classify comments concerned with teacher's control or lack of control of pupil behavior or whether pupils engaged in desirable or undesirable behavior.

(c) Recognition of Individual Pupils. Statements which concerned individual pupils were classified under this item. In order for this item to be used, it was necessary that the teacher actually name or single out a pupil in her evaluation.

(d) Attentiveness of Class. This item was used for classifying responses which dealt with how attentive the pupils were to the lesson.

(e) Participation of Pupils. Teacher comments which reflected concern with pupil participation were coded under this item: that she had called all the pupils, or that pupils had volunteered answers, or that she had maintained a climate which fostered active participation.

(f) Cause of Pupil Behavior. The responses coded under this item were categorized differently from all other items. The purpose for this was to indicate where, if mentioned, the teacher implied the control of pupil behavior lay: within the control of the teacher, beyond the control of the teacher, or both beyond and within the control of the teacher.

V Lesson. This category was used to classify comments concerning the lesson itself. It contains six items.

(a) Objectives. This item was used for statements in which the teacher mentioned the objectives of her lesson or stated that she had or had not met her objective.

(b) Preparation. Teacher statements which indicated that the planning for the lesson had been adequate or inadequate were coded under this item.

(c) Cognitive Level of Questions. Included under this item were comments which were concerned with the types of questions or the level of cognition they elicited.

(d) Suggested a Desired Change. This item was coded if the teacher made a definite statement that she would change the lesson if it were taught a second time.

(e) Recognition of Pupils' Needs. Statements which concerned the teacher's recognition of pupils needs, intellectual, emotional, social, or physical, were recorded under this item.

(f) Presentation-Pacing. This item was used to code statements concerned with the smoothness, understandability, clarity, conciseness, or logic of the lesson.

A sixth category "Overall Reaction to the Video-Tape Experience," was included to determine the teachers' opinions of the value of the video-taping experience.

It was found that the interview responses made under each item could be further classified as being either negative or positive, resulting in a more definitive category system. If the teacher made both a positive and negative remark about the same item the response was coded as "both." Since these categories were not considered mutually exclusive, it was possible for a single statement to be coded under two or more items. An example of the coding system can be found in Appendix B.

In view of the complexity of the material to be coded, it was determined that more than one person should code the material in order to achieve reliability. The same procedure as used by Arno A. Bellack in the coding of the data reported

in The Language of the Classroom[14] was followed. A team of four coders was used. Each interview was first coded by one member of the coding team. This same interview was again coded independently by another member of the coding team. Finally, the disagreements of the first two coders were arbitrated by the third and fourth members of the coding team.

After training in the use of the coding system, each of the four members of the coding team independently coded the same four interviews. Results showed a 90% agreement among the coding team members for the four interviews coded. The procedure previously described was then used in the coding of all of the interviews. After the interviews were coded, the data were transferred to data processing cards for statistical analysis.

Statistical Treatment of the Data

After the verbal responses to Part I of the interview were coded, a statistical method of critically examining the data was chosen. The Critical Ratio Technique was selected because it made possible a comparison of the percentages of each item between groups. The Critical Ratio Technique gave total summed responses for each item choice and converted these total sums into per cents. The t test was then utilized to determine if there was any significant differences between percentages for each item choice between the two groups.

Part II of the interview, which consisted of a rating scale, was analyzed and found to be of no value in making discriminations. The teachers used only the extremes of the rating scale and little information was given in their written statements verifying why they had rated themselves as they did. Many chose not to verify in writing the rating they had given themselves and those that did gave little information. For this reason Part II was not used in the final analysis of the data.

---

[14]Bellack, A. A. The Language of the Classroom. New York: Teachers College Press, 1966.

RESULTS

Comparisons

The results of the analysis of the data are presented in the following sequence. First, the verbal evaluative responses of all of the teachers who were trained in the analysis of teaching behavior were compared with the verbal evaluative responses of all of the teachers who did not receive this special training. Secondly, the verbal responses of the trained in-service teachers were compared with the responses of the untrained in-service teachers. Lastly, the responses of the trained pre-service teachers were compared with the untrained pre-service teachers.

The data reported for each comparison were coded as positive and negative responses which had been made about each item. The code "both" indicates that both a positive and negative remark was made, while omissions indicate that no statement was made about a particular item. The tables present the per cents of teachers who made responses for each item and the analysis of differences betwe n per cents for the groups being compared. All of the items for all of the interviews are reported in this manner except for item 14, Cause of Pupil Behavior, and item 18, Suggested a Change. These two items are reported separately because the responses to these items do not fit the pattern of the majority of the items.

Findings

Tables 1 and 2 report the findings for the first comparison, the per cents of verbal evaluative responses for each item by all teachers who received training in the analysis of teaching behavior with the per cents of verbal responses by all teachers who did not receive the special training. An examination of the tables reveals that there were no statistically significant differences found between groups for any item in any category. The trend of the data indicates that the untrained teachers talked more about the items concerned with personal characteristics than did the trained group, whereas the trained group talked more about other items. However none of these differences reached a statistically significant level. The majority of both the

TABLE 1

Per Cents of Evaluative Responses and t Scores
for All Trained and Untrained Teachers

Items	Nature of Response					
	Positive			Negative		
	Per Cents			Per Cents		
	Trained Teachers	Untrained	t	Trained Teachers	Untrained	t
I. Physical Environment						
1.Video-tape Equipment	15.2	0.0	0.22	6.1	12.1	-0.08
2.Microphone	3.0	0.0	0.10	6.1	3.0	0.06
II. Personal Characteristics						
3.Voice	9.1	12.1	-0.04	6.1	33.3	-0.25
4.Appearance	3.0	12.1	-0.13	6.1	12.1	-0.08
5.Non-Verbal Mannerisms	3.0	0.0	0.10	0.0	18.2	-0.25
6.Verbal Mannerisms	0.0	0.0	0.0	12.1	45.5	-0.25
III. Teacher Characteristics						
7.Dynamism	30.3	27.3	0.02	12.1	3.0	0.13
8.Verbal Behavior	3.0	0.0	0.10	15.2	6.1	0.11
IV. Pupil Behavior						
9.Recognition of Eye Contact	0.0	12.1	-0.20	6.1	0.0	0.14
10.Discipline	6.1	6.1	0.0	21.2	0.0	0.26

TABLE 1--Continued

Nature of Response					
Both Positive and Negative Statements			Omit		
Per Cents			Per Cents		
Trained Teachers	Untrained Teachers	t	Trained Teachers	Untrained Teachers	t
0.0	0.0	0.0	78.8	87.9	-0.04
0.0	0.0	0.0	90.9	97.0	-0.03
0.0	6.0	-1.44	84.9	48.5	0.18
0.0	0.0	0.0	90.9	75.8	0.07
0.0	0.0	0.0	97.0	81.8	0.07
0.0	0.0	0.0	87.9	54.6	0.16
3.0	0.0	1.01	54.6	69.7	-0.08
0.0	0.0	0.0	81.8	93.9	-0.05
0.0	3.0	-1.01	93.9	84.9	0.04
0.0	0.0	0.0	72.7	93.9	-0.09

TABLE 1--Continued

	Nature of Response					
	Positive			Negative		
	Per Cents			Per Cents		
	Trained Teachers	Untrained Teachers	t	Trained Teachers	Untrained Teachers	t
11. Recognition of Individual Pupil	0.0	0.0	0.0	18.2	6.1	0.14
12. Attentiveness of Class	33.3	30.3	0.02	9.1	6.1	0.04
13. Participation of Pupils	39.4	18.2	0.16	15.2	9.1	0.07
V. Lesson						
15. Objectives	24.2	0.0	0.28	9.1	0.0	0.17
16. Preparation	24.2	0.0	0.28	15.2	9.1	0.07
17. Cognitive Level of Questions	15.2	0.0	0.22	0.0	3.0	-0.10
19. Recognition of Pupils' Needs	36.4	6.1	0.27	6.1	6.1	0.0
20. Presentation	39.4	18.2	0.16	18.2	18.2	0.0

* P.05 = 1.96
** P.01 = 2.58

TABLE 1--Continued

Nature of Response					
Both Positive and Negative Statements			Omit		
Per Cents			Per Cents		
Trained Teachers	Untrained Teachers	t	Trained Teachers	Untrained Teachers	t
0.0	0.0	0.0	81.8	93.9	
6.1	0.0	1.44	51.5	63.6	
6.1	9.1	-0.47	39.4	63.6	
3.0	0.0	1.01	63.6	100	
0.0	3.0	-1.01	60.7	87.9	
0.0	0.0	0.0	84.9	97.0	
0.0	0.0	0.0	57.6	87.9	
3.0	3.0	0.0	39.4	60.6	

TABLE 2

Per Cents of Evaluative Responses and t Scores

for All Trained and Untrained Teachers

for the Item "Cause of Pupil Behavior"

Cause of Pupil Behavior	Per Cents		t
	Trained Teachers	Untrained Teachers	
Beyond Teacher Control	15.2	6.1	0.11
Within Control of the Teacher	33.3	3.0	0.29
Both - Beyond and Within Control of Teacher	6.1	3.0	0.59
Omitted Talking about Cause of Pupil Behavior	45.5	87.9	-0.21

* P.05 - 1.96
** P.01 = 2.58

trained teachers (63.6%) and the untrained teachers (69.7%) suggested a change they would make if they were to teach the lesson again.

The results of the comparison between trained and untrained in-service teachers are shown in Tables 3 and 4. As in the first comparison, no significant differences were found between groups. In fact, examination of the per cents indicates these teachers perceived and discussed their teaching behavior in very much the same manner. In addition, the majority of both groups indicated they would change the lesson if they were to teach it again. For the trained group, 90.9% felt they would alter the lesson in some way, 81.8% of the untrained group also indicated they would make a change.

Tables 5 and 6 report the findings of the comparison between the pre-service teachers who received training and those who did not. Although these student teachers made statements that were more similar than different, statistically significant differences were found when comparing per cents of responses in 11 of the 21 items. The student teachers who did not receive training in the analysis of teacher behavior talked more about their personal characteristics than did the trained group. This is indicated by the finding that the untrained group made more negative comments about voice, non-verbal mannerisms and verbal mannerisms than did the trained student teachers. This is further emphasized in that these same items were omitted more often by the trained pre-service teachers.

The only area in which the untrained teachers saw themselves more positively than did the trained teachers was that they felt they had been successful in maintaining eye contact with their pupils.

The trained student teachers seemed to focus more on the teaching act than did the untrained group. The trained teachers talked more about and felt more positive about the items listed under the category, Lesson. They more often stated they had met their objectives, planned well for the lesson, met their pupils needs, asked the right kinds of questions and paced the lesson well. They also seemed more concerned about classroom discipline than did the untrained group and felt that they had not done as well in this area as they would have liked. They also made more negative remarks concerning the amount of pupil participation their lessons had generated. Table 6 clearly shows that the

TABLE 3

Per Cents of Evaluative Responses and t Scores

for Trained and Untrained In Service Teachers

Items	Nature of Response					
	Positive			Negative		
	Per Cents			Per Cents		
	Trained Teachers	Untrained	t	Trained Teachers	Untrained	t
I. Physical Environment						
1. Video-tape Equipment	0.0	0.0	0.0	9.1	18.2	-0.06
2. Microphone	0.0	0.0	0.0	18.2	9.1	0.06
II. Personal Characteristics						
3. Voice	0.0	18.2	-0.14	18.2	45.5	-0.11
4. Appearance	0.0	18.2	-0.14	18.2	18.2	0.0
5. Non-Verbal Mannerisms	0.0	0.0	0.0	0.0	0.0	0.0
6. Verbal Mannerisms	0.0	0.0	0.0	36.4	36.4	0.0
III. Teacher Characteristics						
7. Dynamism	9.1	18.2	-0.06	9.1	0.0	0.10
8. Verbal Behavior	9.1	0.0	0.10	27.3	9.1	0.10
IV. Pupil Behavior						
9. Recognition of Eye Contact	0.0	0.0	0.0	0.0	0.0	0.0
10. Discipline	0.0	0.0	0.0	0.0	0.0	0.0

TABLE 3--Continued

Nature of Response					
Both Positive and Negative Statements			Omit		
Per Cents			Per Cents		
Trained Teachers	Untrained	t	Trained Teachers	Untrained	t
0.0	0.0	0.0	90.9	81.8	0.02
0.0	0.0	0.0	81.8	90.9	-0.02
0.0	0.0	0.0	81.8	36.4	0.14
0.0	0.0	0.0	81.8	63.6	0.05
0.0	0.0	0.0	100.0	100.0	0.0
0.0	0.0	0.0	63.6	63.6	0.0
0.0	0.0	0.0	81.8	81.8	0.0
0.0	0.0	0.0	63.6	63.6	-0.07
0.0	0.0	0.0	100.0	100.0	0.0
0.0	0.0	0.0	100.0	100.0	0.0

TABLE 3--Continued

	Nature of Response					
	Positive			Negative		
	Per Cents			Per Cents		
	Trained Teachers	Untrained Teachers	t	Trained Teachers	Untrained Teachers	t
11. Recognition of Individual Pupil	0.0	0.0	0.0	0.0	0.0	0.0
12. Attentiveness of Class	27.3	27.3	0.0	9.1	18.2	-0.06
13. Participation of Pupils	45.5	18.2	0.11	9.1	27.3	-0.10
V. Lesson						
15. Objectives	18.2	0.0	0.14	18.2	0.0	0.14
16. Preparation	27.3	0.0	0.17	18.2	0.0	0.14
17. Cognitive Level of Questions	0.0	0.0	0.0	0.0	9.1	-0.10
19. Recognition of Pupils' Needs	27.3	0.0	0.17	0.0	9.1	-0.10
20. Presentation	18.2	27.3	-0.04	45.5	27.3	0.07

* P.05 = 1.96
** P.01 = 2.58

TABLE 3--Continued

Nature of Response					
Both Positive and Negative Statements			Omit		
Per Cents			Per Cents		
Trained Teachers	Untrained Teachers	t	Trained Teachers	Untrained Teachers	t
0.0	0.0	0.0	100.0	100.0	0.0
9.1.	0.0	1.02	54.6	54.6	0.0
18.2	0.0	1.48	27.3	54.6	0.10
9.1	0.0	1.02	54.6	100.0	-0.12
0.0	0.0	0.0	54.6	100.0	-0.12
0.0	0.0	0.0	100.0	90.9	0.02
0.0	0.0	0.0	72.7	90.9	-0.05
0.0	9.1	-1.02	36.4	36.4	0.0

TABLE 4

Per Cents of Evaluative Responses and t Scores for Trained and Untrained In-Service Teachers for the Item "Cause of Pupil Behavior"

Cause of Pupil Behavior	Per Cents		
	Trained Teachers	Untrained Teachers	t
Beyond Teacher Control	27.3	0.0	0.17
Within Control of the Teacher	9.1	0.0	0.10
Both - Beyond and Within Control of Teacher	0.0	9.1	-1.02
Omitted Talking about Cause of Pupil Behavior	63.6	90.9	-0.07

* P.05 = 1.96
** P.01 = 2.58

TABLE 5

Per Cents of Evaluative Responses and t Scores for Trained and Untrained Pre-Service Teachers

Items	Nature of Response					
	Positive			Negative		
	Per Cents			Per Cents		
	Trained Teachers	Untrained Teachers	t	Trained Teachers	Untrained Teachers	t
I. Physical Environment						
1. Video-tape Equipment	22.7	0.0	2.38*	4.5	9.1	-0.60
2. Microphone	4.5	0.0	1.01	0.0	0.0	0.0
II. Personal Characteristics						
3. Voice	13.6	9.1	0.47	0.0	27.3	-2.64**
4. Appearance	4.5	9.1	-0.60	0.0	9.1	-1.45
5. Non-Verbal Mannerisms	4.5	0.0	1.01	0.0	27.3	-2.64**
6. Verbal Mannerisms	0.0	0.0	0.0	0.0	50.0	-3.83**
III Teacher Characteristics						
7. Dynamism	40.9	31.8	0.63	13.6	4.5	1.05
8. Verbal Behavior	0.0	0.0	0.0	9.1	4.5	0.60
IV. Pupil Behavior						
9. Recognition of Eye Contact	0.0	18.2	-2.10*	9.1	0.0	1.45
10. Discipline	9.1	9.1	0.0	31.8	0.0	2.89**

TABLE 5--Continued

Nature of Response					
Both Positive and Negative Statements			Omit		
Per Cents			Per Cents		
Trained Teachers	Untrained Teachers	t	Trained Teachers	Untrained Teachers	t
0.0	0.0	0.0	72.7	90.9	-1.56
0.0	0.0	0.0	95.5	100.0	-1.01
0.0	9.1	-1.45	86.4	54.5	2.31*
0.0	0.0	0.0	95.5	81.8	1.43
0.0	0.0	0.0	95.5	72.7	2.06*
0.0	0.0	0.0	100.0	50.0	3.83**
4.5	0.0	1.01	40.9	63.6	-1.51
0.0	0.0	0.0	90.9	95.5	-0.60
0.0	4.5	-1.01	90.9	77.3	1.24
0.0	0.0	0.0	59.1	90.9	-2.44*

TABLE 5--Continued

	Nature of Response					
	Positive			Negative		
	Per Cents			Per Cents		
	Trained Teachers	Untrained Teachers	t	Trained Teachers	Untrained Teachers	t
11. Recognition of Individual Pupil	0.0	0.0	0.0	27.3	9.1	1.56
12. Attentiveness of Class	36.4	31.8	0.32	9.1	0.0	1.45
13. Participation of Pupils	36.4	18.2	1.35	18.2	0.0	2.10*
V. Lesson						
15. Objectives	27.3	0.0	2.64**	4.5	0.0	1.01
16. Preparation	22.7	0.0	2.38**	13.6	13.6	0.0
17. Cognitive Level of Questions	22.7	0.0	2.38**	0.0	0.0	0.0
19. Recognition of Pupils' Needs	40.9	9.1	2.44*	9.1	4.5	0.60
20. Presentation	50.0	13.6	2.59**	4.5	13.6	-1.05

* P.05 = 1.96
** P.01 = 2.53

TABLE 5--Continued

Nature of Response					
Both Positive and Negative Statements			Omit		
Per Cents			Per Cents		
Trained Teachers	Untrained Teachers	t	Trained Teachers	Untrained Teachers	t
0.0	0.0	0.0	72.7	90.9	-1.56
4.5	0.0	1.01	50.0	68.2	-1.23
0.0	13.6	-1.79	45.5	68.2	-1.52
0.0	0.0	0.0	68.2	100.0	-2.89**
0.0	4.5	-1.01	63.6	81.8	-1.35
0.0	0.0	0.0	77.3	100.0	-2.38**
0.0	0.0	0.0	50.0	86.4	-2.59**
0.0	0.0	0.0	40.9	72.7	-2.13*

TABLE 6

Per Cents of Evaluative Responses and t Scores for Trained and Untrained Pre-Service Teachers for the Item "Cause of Pupil Behavior"

Cause of Pupil Behavior	Per Cents		t
	Trained Teachers	Untrained Teachers	
Beyond Teacher Control	9.1	9.1	0.0
Within Control of the Teacher	45.5	4.5	3.13**
Both - Beycnd and Within Control of Teacher	9.1	0.0	1.45
Omitted Talking about Cause of Pupil Behavior	36.4	86.4	-3.41**

* P.05 = 1.96
** P.01 = 2.58

student teachers who received training also believed pupil behavior was within their control and they talked more about this item.

Those student teachers with training seemed less inclined to believe they should change their lesson (50%) than the untrained group (63.3%), although this was not a statistically significant difference.

CONCLUSIONS

The data from this study very clearly illustrates on what factors these teachers tended to focus when they evaluated their own teaching performance without the use of externally imposed criteria. The teachers in this study tended to look at:

(1) themselves as people
(2) themselves as teachers
(3) their pupils
(4) the teaching act itself

Perhaps a point to be made here is that these same factors might not be the same for teachers at all levels, perhaps if these teachers had been teaching in the secondary school they might have examined their teaching in a different way.

It is possible to speculate as to why the training had seemingly no influence on the experienced teacher and so little influence on the student teacher. Fifteen weeks is a relatively short period to perfect a teachers' conceptualization of the role and behavior of the teacher. Also each of the skills taught were complex ones, the teachers were perhaps overwhelmed by the amount of concepts to be acquired and utilized.

Another point which might be made is that the experienced teachers of the study who received training were a carefully selected group as are all of the cooperating teachers who serve in the teacher education program at the University of Alabama. These teachers might well feel they are fully in control of the evaluation process and tend to reject any framework for viewing themselves that would be different from what they have used in the past.

A final conclusion can be drawn from the study. The concept a teacher holds of her role and behavior as a teacher does not change easily. If one desires to change what teachers perceive about themselves the process cannot be short nor will it be accomplished easily.

BIBLIOGRAPHY

Adams, W. C. "Two Teacher Rating Cards." American School Board Journal, 1919, 59:101.

Amidon, E. J. "Dependent-prone Students in Experimental Learning Situations." Unpublished doctoral dissertation. Minneapolis, Minnesota: University of Minnesota, 1959.

Barr, A. S. "The Measurement and Prediction of Teaching Efficiency: A Summary of Investigations." Journal of Experimental Education, 16:203-283, 1948.

Bellack, A. A. The Language of the Classroom. New York: Teachers College Press, 1966.

Bentley, E. L. and Miller, E. Systematic Observation: The Reciprocal Category System. Atlanta: Supplementary Education Center, 1969.

Bondi, J. C. "The Effects of Interaction Analysis Feedback on the Verbal Behavior of Student Teachers" Educational Leadership, 1969, 26:794-799.

Brown, Bob Burton. "An Investigation of Observer-Judge Ratings of Teacher Competence" U.S.O.E. Contract No. 6-10-288 Gainesville, Florida: University of Florida, 1969.

Flanders, N. A. "Teacher Influence, Pupils' Attitudes, and Achievement." Ann Arbor, Michigan: University of Michigan, 1962.

Foster, F. M. "A Score Card for Rural Teachers" School and Society, 1920, 12:132.

Herrick, Virgil E. "The Evaluation of Change in Programs of In-Service Education." Part I, Fifty-Sixth Yearbook, National Society for the Study of Education. Chicago, 1957.

McNeil, John. "Concomitants of Using Behavioral Objectives in the Assessment of Teacher Effectiveness." Journal of Experimental Education, Fall, 1967, 36:69-74.

Ober, Richard L. "The Nature of Interaction Analysis" High School Journal, October, 1967, 51:7-16.

Webb, J. N. "The Florida Taxonomy of Cognitive Behavior: A Working Manual" In A. Simon and E. G. Boyer (Ed.) Mirrors for Behavior, Vol. 8 Philadelphia: Research for Better Schools, Inc. 1970.

Wiedefeld, M. T. "Teacher Self-Rating Scale" Elementary School Journal, 1924, 24:569.

APPENDIX A

ALABAMA FUNNEL SELF-EVALUATIONAL INTERVIEW GUIDE

INTERVIEW GUIDE

There are two sections in this guide. Part I consists of four open-ended questions. Part II focuses more directly on the teaching situation. The following procedures were used in the construction of the instrument:

1. A group of 40 students in Elementary Education who were enrolled in the course NSE 4, General Science, were asked to stipulate what they would want to know about their teaching ability while they were student teaching.

2. The literature on self-evaluation was carefully researched for pertinent ideas and suggestions.

3. Members of the elementary education faculty of the College of Education at the University of Alabama were consulted concerning items to be included in the interview guide.

4. Members of the Graduate School of Social Work faculty at the University of Alabama were consulted concerning the construction of the interview guide.

5. Recommendations from The Dynamics of Interviewing by Robert L. Kahn and Charles F. Cannel were used as a basis for the construction of the interview guide.

After the interview guide was constructed, it was presented to four elementary education professors for suggestions and approval. Two teachers in the Tuscaloosa City School System participated in a preliminary study. These two teachers were video-taped while teaching a fifteen-minute lesson. Immediately after teaching the lesson, they watched the replay of the lesson and were interviewed by the investigator using the Alabama Funnel Self-Evaluational Interview Guide. The preliminary study revealed no difficulties or misunderstandings concerning either the procedure or the items of the interview guide.

Alabama Funnel Self-Evaluational Interview Guide

Part I

1. How do you feel about the lesson you just viewed?

2. What did you see that you liked about yourself? About the lesson?

3. What did you see that you did not like about yoursef? About the lesson?

4. If you were to teach this lesson again, would you change it in any way?

Part II

I. Objectives of the Lesson Just Viewed

1. I achieved the objectives of my lesson.

1	2	3	4	5
not at all		moderately		fully

Explain:

_____

_____

_____

2. The activities I used related directly to the achievement of my objectives.

1	2	3	4	5
not at all		moderately		fully

Explain:

_____

_____

_____

3. The objectives were realistically related to the pupils in the class.

1	2	3	4	5
not at all		moderately		fully

Explain:

_____

_____

_____

4. If I were to teach the same lesson again, I would change my objectives.

1	2	3	4	5
not at all		moderately		fully

Explain:

_____

_____

_____

II. Organization of the Lesson Taught

1. I agree with the progression of the lesson as I taught it.

1	2	3	4	5
not at all		moderately		fully

Explain:

_____

_____

_____

2. If I were to teach this lesson again, I would change the progression.

1	2	3	4	5
not at all		moderately		fully

Explain:

_____

_____

_____

III. Procedures and Techniques

1. I was satisfied with all procedures and techniques I used in the lesson.

1	2	3	4	5
not at all		moderately		fully

Explain:

_____

_____

_____

2. I was aware of the amount of talking I did before I viewed the video tape.

1	2	3	4	5
not at all		moderately		fully

Explain:

_____

_____

_____

3. I was aware of the amount of talking I did after I viewed the video tape for the first time.

1	2	3	4	5
not at all		moderately		fully

Explain:

_____

_____

_____

IV. Students' Reaction to the Lesson

1. I was aware of the students' reactions to my lesson as I was teaching the lesson.

1	2	3	4	5
not at all		moderately		fully

Explain:

_____

_____

_____

2. I was aware of the students' reactions to my lesson after I viewed the video tape for the first time.

1	2	3	4	5
not at all		moderately		fully

Explain:

_____

_____

_____

3. I felt after I taught the lesson that the students would go further or search out more information on their own.

1	2	3	4	5
not at all		moderately		fully

Explain:

_____

_____

_____

4. I felt after I viewed the lesson on video tape that the students would go further or search out more information on their own.

1	2	3	4	5
not at all		moderately		fully

Explain:

_____

_____

_____

V. Overall Evaluation

1. The next lesson I teach, I will change my teaching behavior (verbal and/or nonverbal).

1	2	3	4	5
not at all		moderately		fully

Explain:

_____

_____

_____

2. Particular change (s) I would make in my teaching behavior (verbal and/or nonverbal) are:

_____

_____

_____

APPENDIX B

CODING SYSTEM

Data Coding System

	Yes	No
I. Physical Environment		
1. Video tape equipment (camera)		
a. Positive remark		
b. Negative remark		
c. Both		
2. Microphone (explicitly stated)		
a. Positive remark		
b. Negative remark		
c. Both		
II. Personal Characteristics (How perceived self)		
3. Voice (quality - high, low, harsh, clearness in the sense of being understandable, dialect)		
a. Positive remark		
b. Negative remark		
c. Both		
4. Appearance (how I looked, facial expression)		
a. Positive remark		
b. Negative remark		
c. Both		
5. Non-verbal Mannerisms (What I did with my hands)		
a. Positive remark		
b. Negative remark		
c. Both		
6. Mannerisms (repetition of certain words)		
a. Positive remark		
b. Negative remark		
c. Both		

Yes No

III. Teacher Characteristics

7. Dynamism (poise, etc.)

a. Positive remark
b. Negative remark
c. Both

8. Amount of Verbal Behavior (amount of talking)

a. Positive remark
b. Negative remark
c. Both

IV. Pupil Behavior

9. Recognition of eye contact

a. Positive remark
b. Negative remark
c. Both

10. Discipline

a. Positive remark
b. Negative remark
c. Both

11. Recognition of Individual Pupil (names or singles out individual Pupil)

a. Positive remark
b. Negative remark
c. Both

12. Attentiveness of Class (posture, awareness of place in lesson)

a. Positive remark
b. Negative remark
c. Both

Yes No

13. Participation of Pupils (called on all pupils, pupils volunteered answers, general class climate)

    a. Positive remark
    b. Negative remark
    c. Both

14. Cause of Pupil Behavior

    a. Positive remark
    b. Negative remark
    c. Both

V. Lesson

15. Objectives (teacher mentions objective or states she has met her objective)

    a. Positive remark
    b. Negative remark
    c. Both

16. Preparation (planning, teacher or pupil)

    a. Positive remark
    b. Negative remark
    c. Both

17. Types or Cognitive Level of Questions

    a. Positive remark
    b. Negative remark
    c. Both

18. Suggested a Desired Change (must make a definite statement)

19. Pupils' Needs (intellectual, emotional, social, physical)

    a. Positive remark
    b. Negative remark
    c. Both

	Yes	No
20. Presentation - Pacing (lesson ran smoothly, understandably, clearly, concisely)		
a. Positive remark		
b. Negative remark		
c. Both		

VI. Overall Reaction to the Video-Tape Experience

a. Positive remark
b. Negative remark
c. Both